

# INITIWIINATIONAL SEARCH REPORT

International Application No  
PCT/US2004/038781

A CLASSIFICATION OF SUBJECT MATTER  
INV. A61K47/48

According to International Patent Classification (IPC) of to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	HANG H. C. ET AL: "Ketone isosteres of 2-N-Acetamidodisugars as substrate for metabolic cell surface engineering" J. AM. CHEM. SOC, vol. 123, 2001, pages 1242-1243, XP00805622 page 1243, column 2, paragraph 3; figures 1b, 2	1-4, 8-18, 22-38, 42-48
X	KHIDEKEL N. ET AL: "A chemoenzymatic approach toward the rapid and sensitive detection of O-GlcNAc posttranslational modifications" J AM. CHEM. SOC, vol. 125, June 2003 (2003-06), pages 16162-16163, XP008055588 page 16162, column 2 - page 16163; figure 1	1-4, 8-13, 16-18, 22-26, 28-38, 42-45

☒ Further documents are listed in the continuation of box C

☒ Patent family members are listed in annex

### \* Special categories of cited documents

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"T" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17 November 2005

Date of mailing of the international search report

06. 03 2006

Name and mailing address of the ISA

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PCT/US2004/038781

## C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	QASBA P K: "Involvement of sugars in protein-protein interactions" CARBOHYDRATE POLYMERS, APPLIED SCIENCE PUBLISHERS, LTD. BARKING, GB, vol . 41, no. 3, March 2000 (2000-03) , pages 293-309, XP004244362 ISSN: 0144-8617 figure 12	1-4, 8-18, 22-38, 42-48
P,X	----- wo 2004/063344 A (NATIONAL INSTITUTES OF HEALTH; QASBA, PRADMAN; RAMAKRISHNAN, BOOPATHY;) 29 July 2004 (2004-07-29)  page 28; claims 43-49  -----	1-4, 8-18, 22-38, 42-48
P,X	wo 2004/017810 A (BIOTI ETHERAPIES CORP; NATUNEN, JARI ; TENEBERG, SUSANN; KARLSSON, KARL) 4 March 2004 (2004-03-04)  page 28; claim 54 page 32 page 39, paragraph 2 claims 10,14,15; examples 4,7,13  -----	1-4,8, 13-18, 22, 27-32, 37,38, 42-48
P,X	wo 2004/019992 A (CHIRON SRL; GIANNOZZI, ALDO; AVERANI, GIOVANNI ; NORELLI, FRANCESCO; CO) 11 March 2004 (2004-03-11)  page 8; claims 33,43 figures 1,2  -----	1-3, 8-10, 13-18, 22-24, 27-29, 43-48
E	us 2005/130235 A1 (HSI EH-WILSON L.) 16 June 2005 (2005-06-16)  page 2; figures 1B, 3-5, 13,21 page 10, column 1; claims 31-34,41,42  -----	1-4, 8-18, 22-38, 42-48

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2004/038781

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

- 1 ☒ Claims Nos  
because they relate to subject matter not required to be searched by this Authority, namely  
Although claims 13-18, 22-29, 45,46 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
- 2 ☐ Claims nos  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically
- 3 ☐ Claims Nos  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

see additi onal sheet

- 1 ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims
- 2 ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee
- 3 ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid specifically claims Nos
- 4 ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims it is covered by claims Nos  
1-4, 8-18, 22-38, 42-48 in part

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest
- ☐ No protest accompanied the payment of additional search fees

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4, 8-18, 22-38, 42-48 in part

A targeted glycoconjugate comprising a bioactive agent and a targeting compound wherein the bioactive agent and targeting compound are joined by a modified saccharide compound and wherein the targeting compound comprises a glycoprotein.  
Excluding the subject matter of inventions 2-5.

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2. claims: 1-4, 8-18, 22-38, 42-48 in part

A targeted glycoconjugate comprising a bioactive agent and a targeting compound wherein the bioactive agent and targeting compound are joined by a modified saccharide compound and wherein the targeting compound comprises a glycolipid.  
Excluding the subject matter of inventions 1, 3-5.

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3. claims: 1-4, 8-18, 22-38, 42-48 in part

A targeted glycoconjugate comprising a bioactive agent and a targeting compound wherein the bioactive agent and targeting compound are joined by a modified saccharide compound and wherein the targeting compound comprises a carbohydrate.  
Excluding the subject matter of inventions 1, 2, 4, 5.

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4. claims: 1, 4-16, 18-36, 38-48 in part

A targeted glycoconjugate comprising a bioactive agent and a targeting compound wherein the bioactive agent and targeting compound are joined by a modified saccharide compound and wherein the targeting compound comprises a receptor ligand.  
Excluding the subject matter of inventions 1-3, 5.

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5. claims: 1, 4-16, 18-36, 38-48 in part

A targeted glycoconjugate comprising a bioactive agent and a targeting compound wherein the bioactive agent and targeting compound are joined by a modified saccharide compound and wherein the targeting compound comprises an antibody.  
Excluding the subject matter of inventions 1-4.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004063344 A	29-07-2004	AU 2004204463 A1 CA 2510550 A1 EP 1587919 A2	29-07-2004 29-07-2004 26-10-2005
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